

# **PROJECT REPORT**

**On**

## **“BUDGET MANAGEMENT APP”**

Department of Computer Engineering & Applications  
**GLA UNIVERSITY**



**GLA University**  
**Mathura- 281406, INDIA**  
**2022-2023**

### **SUBMITTED BY:-**

**Tanish Gupta (201500732)**  
**Akansh Jain (201500055)**  
**Akshat Verma (201500068)**  
**Pranjul Maheshwari (201500502)**  
**Samarth Maheshwari(201500612)**

### **SUBMITTED TO:-**

**Mr. Akash Kumar Choudhary**  
**(Technical Trainer)**

## **Declaration**

We hereby declare that the work which is being presented in the mini project “**Budget Management App**”, in partial fulfilment of the requirements for mini project viva voce, is an authentic record of our own work carried by the team members under the supervision of our mentor Mr. Akash Kumar Choudhary.

Group Members:

Tanish Gupta (201500732)

Akansh Jain (201500055)

Akshat Verma (201500068)

Pranjul Maheshwari (201500502)

Samarth Maheshwari (201500612)

Course: B.Tech (Computer Science and Engineering)

Year: 3<sup>rd</sup>

Semester: 5<sup>th</sup>

Supervised By :

Mr. Akash Kumar Choudhary

Technical Trainer,

GLA University, Department of Computer Engineering & Application



**Department of computer Engineering and Applications**  
**GLA University, Mathura**

**17 km. Stone NH#2, Mathura-Delhi Road, P.O. – Chaumuha,  
Mathura – 281406**

---

**Certificate**

This is to certify that the above statements made by the candidates are correct to the best of my/our knowledge and belief.

\_\_\_\_\_ Supervisor

Mr. Akash Kumar Choudhary

Technical Trainer

Dept of CEA, GLA University

\_\_\_\_\_

Project Mentor

(Mr. Akash Kumar Choudhary)

\_\_\_\_\_

Program Coordinator

(Mr. Shashi Shekar)

## **About the Project**

Our Project “Budget Management App” is a web application which is built using multiple web technologies. The primary technology used in creating our project is JavaScript and React which is a library of JavaScript itself. The main goal behind using React for our project was that its applications are relatively faster and smoother than other web technologies.

The “Budget Management App” is designed in such a way that it can keep a track of your expenses without any hassle. It is a web application with simple user interface which makes it easier to use. It is made using web technologies like HTML, CSS, JavaScript, React. The application has a local storage where all of the data is stored.

This makes our application “Budget Management App” an efficient and convenient tool for users to keep a track on their daily life expenses and manage their budget accordingly.

## **Motivation**

The “Budget Management App” has been developed to solve the problems faced by users in keeping a track of their daily life expenses. We have seen that many people spend much money and at the end of their day it gets difficult to remember the amount and articles they have spent on. This leads to confusion and irritation to people. So we decide built a platform to help people manage their expenses. This application helps to manage the budget by keeping a list of their expenses along with their minimum budget. Users can type their budget, expenses and the list of articles they have spent on which make it easier for them to keep a track on their expenses.

# **Requirements**

## **a). Software Requirements:**

- Technology Implemented: React Context API
- Languages/Technologies Used: HTML, CSS, JavaScript, React
- Code Editor: V.S Code
- Web Browser: Google Chrome
- GitHub: GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere. GitHub Repository: A GitHub repository can be used to store a development project. It can contain folders and any type of files (HTML, CSS, JavaScript, Documents, Data, Images). A GitHub repository should also include a license file and a README file about the project. A GitHub repository can also be used to store ideas, or any resources that you want to share.
- V.S Code: Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

## **b). Hardware Requirements:**

- Processor Required: Intel i3,i5,i7
- Operating System: Windows 10
- RAM: 4GB
- Hardware Devices: Computer System
- Hard Disk: 256GB

## **Acknowledgement**

We thank the almighty for giving us the courage and perseverance in completing the project. This project itself is an acknowledgement for all those people who have given us their heartfelt co-operation in making this project a grand success.

We extend our sincere thanks to Mr. Akash Kumar Choudhary, Technical Trainer at “GLA University, Mathura” for providing his valuable guidance at every stage of this project work. We are profoundly grateful towards the unmatched services rendered by him. And last but not least, we would like to express our deep sense of gratitude and earnest thanks giving to our dear parents for their moral support and heartfelt cooperation in doing the project.

## **Budget Management App**

### **Abstract**

The "Budget Management App" has been developed to override the problems faced by people in managing their budget. This application is designed for the particular need of the people to carry out operations in a smooth and effective manner. The application helps you to reduce as much as queries possible. No formal knowledge is needed for the user to use this application.



# **Contents**

<b>Acknowledgment.....</b>	
<b>Abstract.....</b>	
<b>1.Introduction</b>	<b>10</b>
<b>2.Technologies Used: -----</b>	<b>11</b>
a-HTML -----	<b>Error! Bookmark not defined.</b>
b-CSS-----	14
c-Javascript -----	<b>Error! Bookmark not defined.</b>
d-React -----	
<b>3.List Of Figures.....</b>	
<b>4.Conclusion.....</b>	
<b>5. Bibliography.....</b>	

# Introduction

In today's world it's very difficult to manage the expenses and income which calculates our budget. so, this budget management system will keep the track of our daily expenses along with our budget .This app will show us the balance by calculating our expense and income. Entries of expense will be shown on one side and income will be shown on other side. After that there will be an option of adding new transactions so there will be an option of adding name of expense or income and after that adding the amount of the income or expense. On the other half of the page there will be an list of Transaction History of Income and Expenses.

## *Technologies Used*

---

### What is HTML?

### HTML stands for Hyper Text Markup Language

- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

A simple HTML document

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>

    <h1>My First Heading</h1>
    <p>My first paragraph.</p>

  </body>
</html>
```

## **Uses of HTML :**

- 1). Structuring web pages
- 2). Navigating the internet
- 3). Embedding images and videos
- 4). Improving client-side data storage and offline capabilities
- 5). Game development
- 6). Interacting with native APIs

# CSS is the language we use to style a Web page.

---

## What is CSS?

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External style sheets are stored in CSS files

HTML was NEVER intended to contain tags for formatting a web page!

HTML was created to describe the content of a web page, like:

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

When tags like `<font>`, and color attributes were added to the HTML 3.2 specification, it started a nightmare for web developers. Development of large websites, where fonts and color. I I information were added to every single page, became a long and expensive process.

To solve this problem, the World Wide Web Consortium (W3C) created CSS.

CSS removed the style formatting from the HTML page!

# **JavaScript**

JavaScript is a dynamic computer programming language. It is lightweight and used as a part of pages, whose implementations allow client-side script user and make dynamic pages. It is an interpreted programming language with capabilities.

## Advantages

- Less server interaction - You can validate user input before sending server. This saves server traffic, which means less load on your server

Immediate feedback to the visitors - They don't have to wait for a page they have forgotten to enter something.

- Increased interactivity - You can create interfaces that react when they are clicked with a mouse or activated via the keyboard.

- Richer interfaces - You can use JavaScript to include such items as components and sliders to give a Rich Interface to your site visitors.

## **Data Types :**

JavaScript allows you to work with three primitive data types

1). Numbers, e.g. 123, 120.50 etc.

2). Strings of text e.g. "This text string" etc.

3). Boolean e.g. true or false.

## Trivial data types

null and undefined, each of which defines only a single value.

## **React(Javascript Library)**

*React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces based on UI components.. It is maintained by Meta (formerly Facebook) and a community of individual developers and companies. React can be used as a base in the development of single-page, mobile, or server-rendered applications with frameworks like Next.js. However, React is only concerned with state management and rendering that state to the DOM so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.*

## **COMPONENTS**

*React code is made of entities called Components. These components are reusable and must be formed in the SRC folder following the Pascal Case as its naming convention (capitalize camelCase). Components can be rendered to a particular element in the DOM using the React DOM library. When rendering a component, one can pass the values between components through  
"props"*

# **JSX**

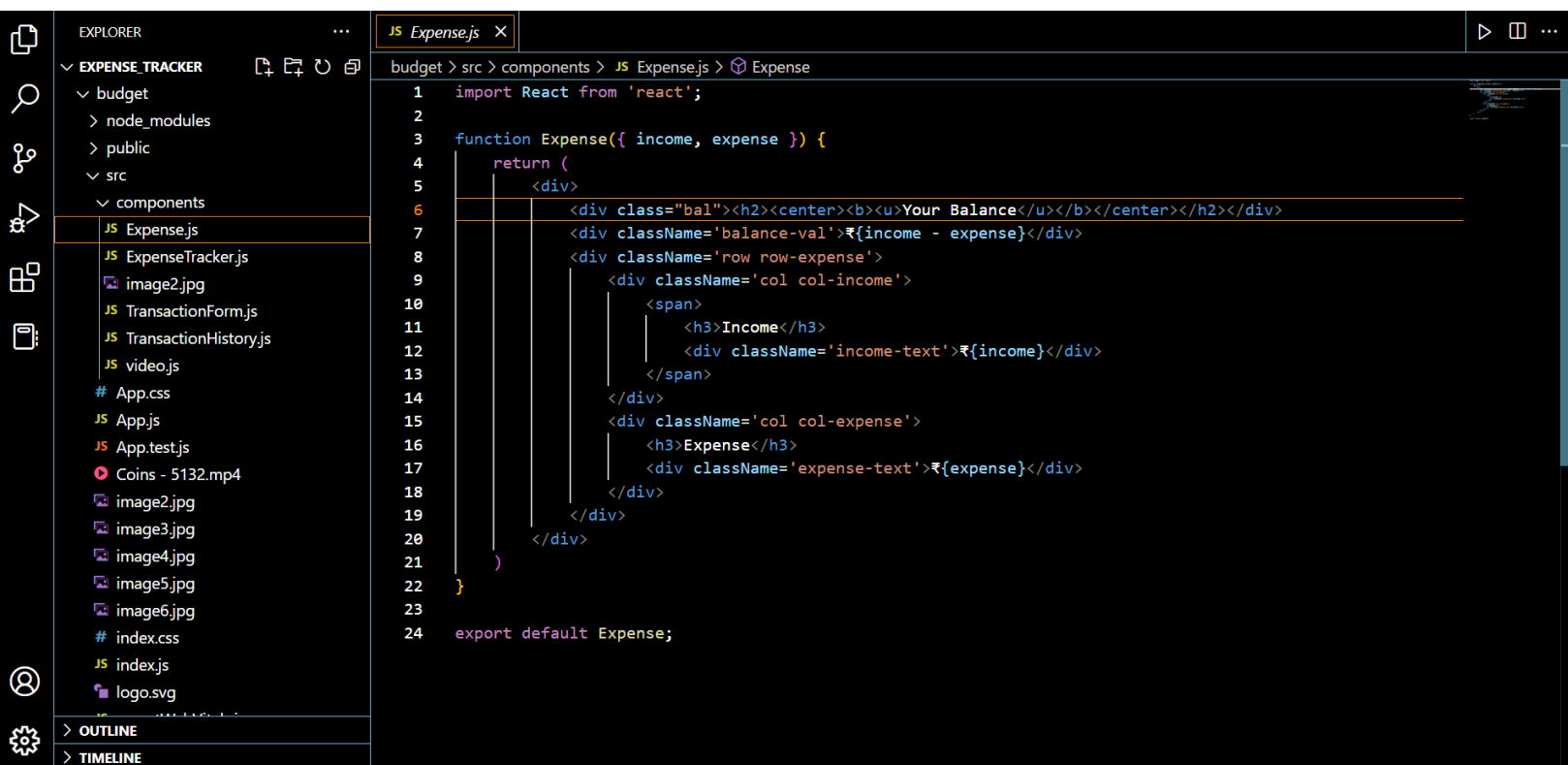
*JSX, or JavaScript Syntax Extension, is an extension to the JavaScript language syntax.<sup>1</sup> Similar in appearance to HTML, JSX provides a way to structure component rendering using syntax familiar to many developers. React components are typically written using JSX, although they do not have to be (components may also be written in pure JavaScript). JSX is similar to another extension syntax created by Facebook for PHP called XHP.*



# List of Figures

## Components

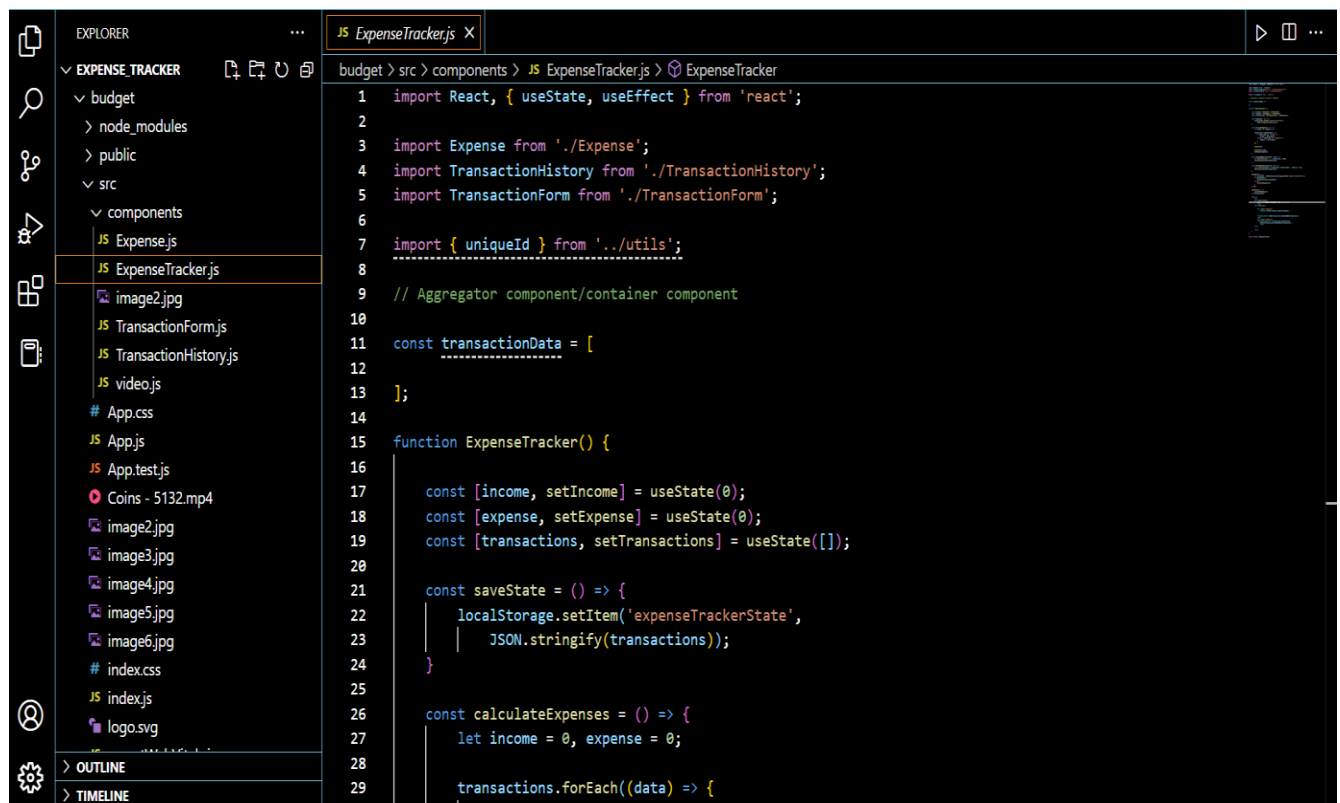
**1-Expense:** *In this component we create a function expense and in this we return the Income and Expense.*



The screenshot displays a code editor with a file explorer on the left and a code editor on the right. The file explorer shows a project structure with folders like 'EXPENSE\_TRACKER', 'budget', 'node\_modules', 'public', 'src', and 'components'. The 'components' folder is expanded, showing 'Expense.js' selected. The code editor shows the following code:

```
1 import React from 'react';
2
3 function Expense({ income, expense }) {
4   return (
5     <div>
6       <div class="bal"><h2><center><b><u>Your Balance</u></b></center></h2></div>
7       <div className='balance-val'>₹{income - expense}</div>
8       <div className='row row-expense'>
9         <div className='col col-income'>
10           <span>
11             <h3>Income</h3>
12             <div className='income-text'>₹{income}</div>
13           </span>
14         </div>
15         <div className='col col-expense'>
16           <h3>Expense</h3>
17           <div className='expense-text'>₹{expense}</div>
18         </div>
19       </div>
20     </div>
21   )
22 }
23
24 export default Expense;
```

**2-Expense Tracker:** *It aggregates the different components and calculate the expense total and also we add the database in the local storage.*



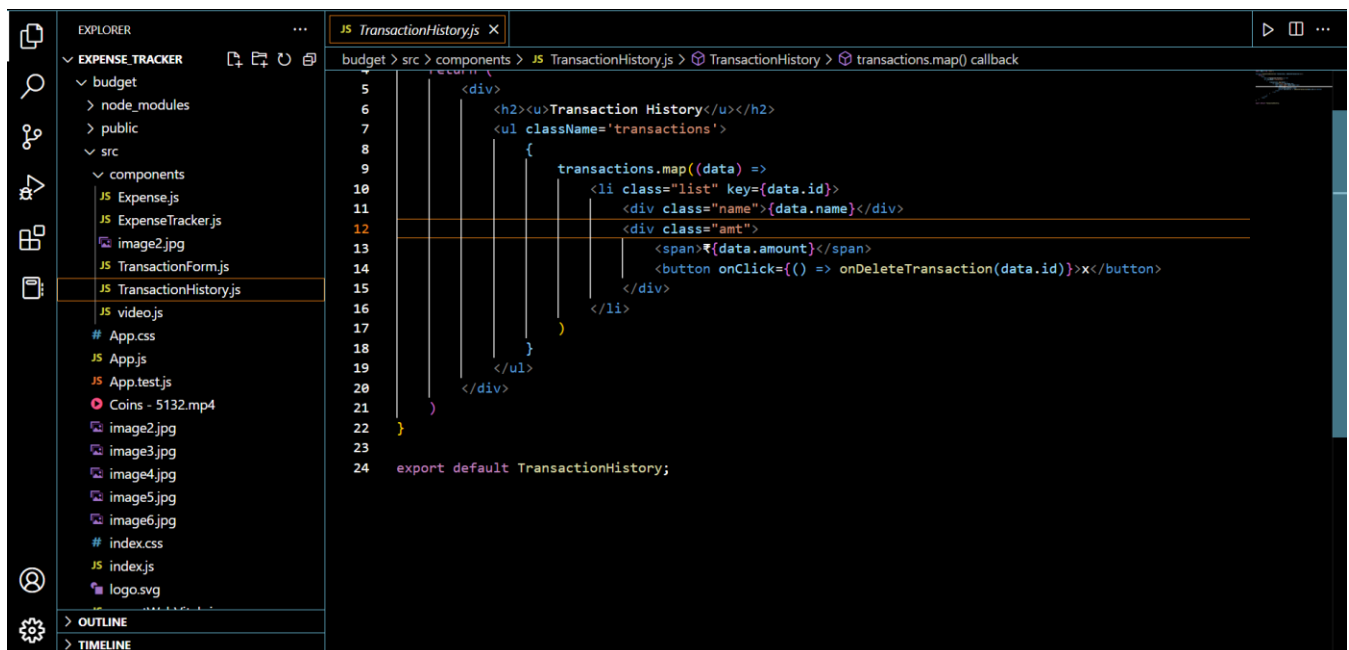
```
1  import React, { useState, useEffect } from 'react';
2
3  import Expense from './Expense';
4  import TransactionHistory from './TransactionHistory';
5  import TransactionForm from './TransactionForm';
6
7  import { uniqueId } from '../utils';
8
9  // Aggregator component/container component
10
11  const transactionData = [
12
13  ];
14
15  function ExpenseTracker() {
16
17      const [income, setIncome] = useState(0);
18      const [expense, setExpense] = useState(0);
19      const [transactions, setTransactions] = useState([]);
20
21      const saveState = () => {
22          localStorage.setItem('expenseTrackerState',
23              | JSON.stringify(transactions));
24      }
25
26      const calculateExpenses = () => {
27          let income = 0, expense = 0;
28
29          transactions.forEach((data) => {
30              | if (data.type === 'income') {
31                  | income += data.amount;
32              } else if (data.type === 'expense') {
33                  | expense += data.amount;
34              }
35          });
36      }
37  }
```

### **3-Transaction Form:** *It is adding the form to add the expense and the income.*



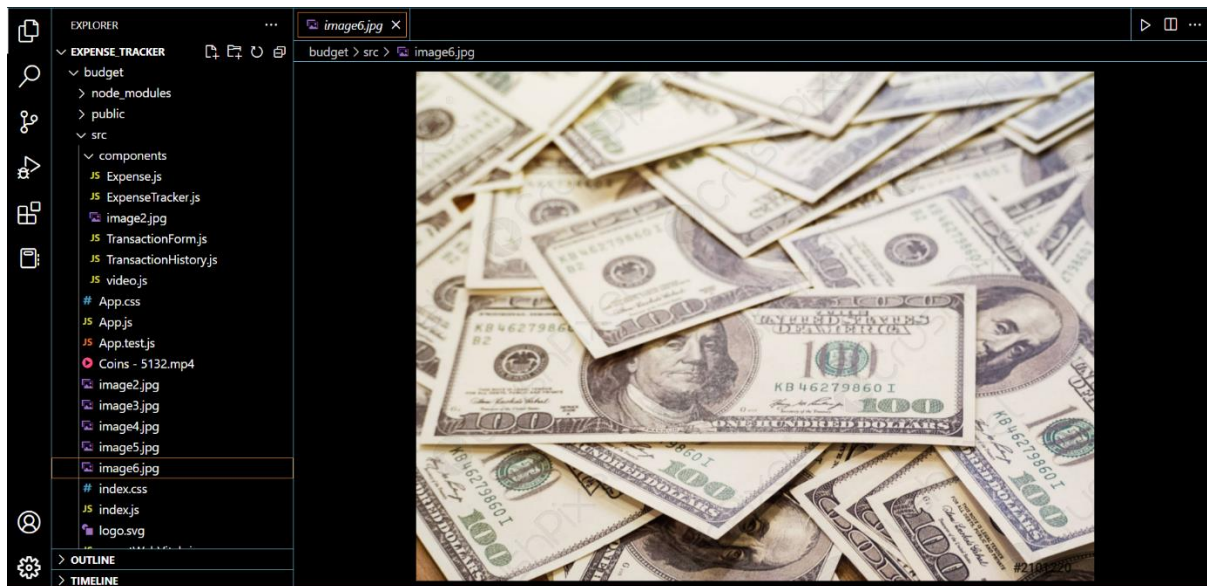
```
1 import React, { useState } from 'react';
2 import { uniqueId } from '../utils';
3
4 function TransactionForm({ onNewTransaction }) {
5   const [nameValue, setNameValue] = useState('');
6   const [amountValue, setAmountValue] = useState('');
7
8   const addTransaction = (type, evt) => {
9     evt.preventDefault();
10
11     const data = { id: uniqueId(), name: nameValue,
12                   | amount: parseInt(amountValue), type: type };
13
14     onNewTransaction(data);
15
16     setNameValue('');
17     setAmountValue('');
18   }
19
20   return (
21     <div>
22       <h3>Add New Transactions</h3>
23       <form className='transaction-form'>
24         <label class="name">
25           Name
26           <div>
27             <input type="text" value={nameValue}
28               | onChange={(e) => setNameValue(e.target.value)} />
29           </div>
30         </label>
31       </form>
32     </div>
33   );
34 }
```

**4-Transaction History:** In this component we are to display the transactions on the right half of the page also available for the deletion of the transactions.

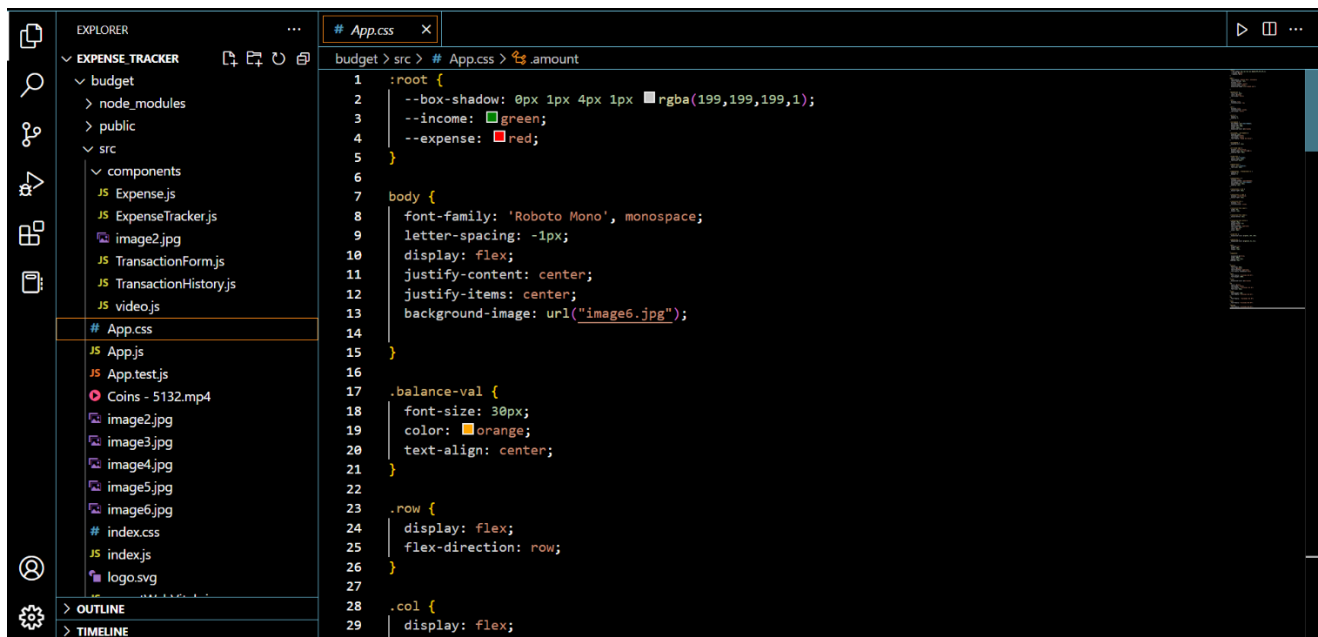


```
5      <div>
6        <h2><u>Transaction History</u></h2>
7        <ul className='transactions'>
8          {
9            transactions.map((data) =>
10              <li class="list" key={data.id}>
11                <div class="name">{data.name}</div>
12                <div class="amt">
13                  <span>₹{data.amount}</span>
14                  <button onClick={() => onDeleteTransaction(data.id)}>x</button>
15                </div>
16              </li>
17            )
18          }
19        </ul>
20      </div>
21    )
22  }
23
24  export default TransactionHistory;
```

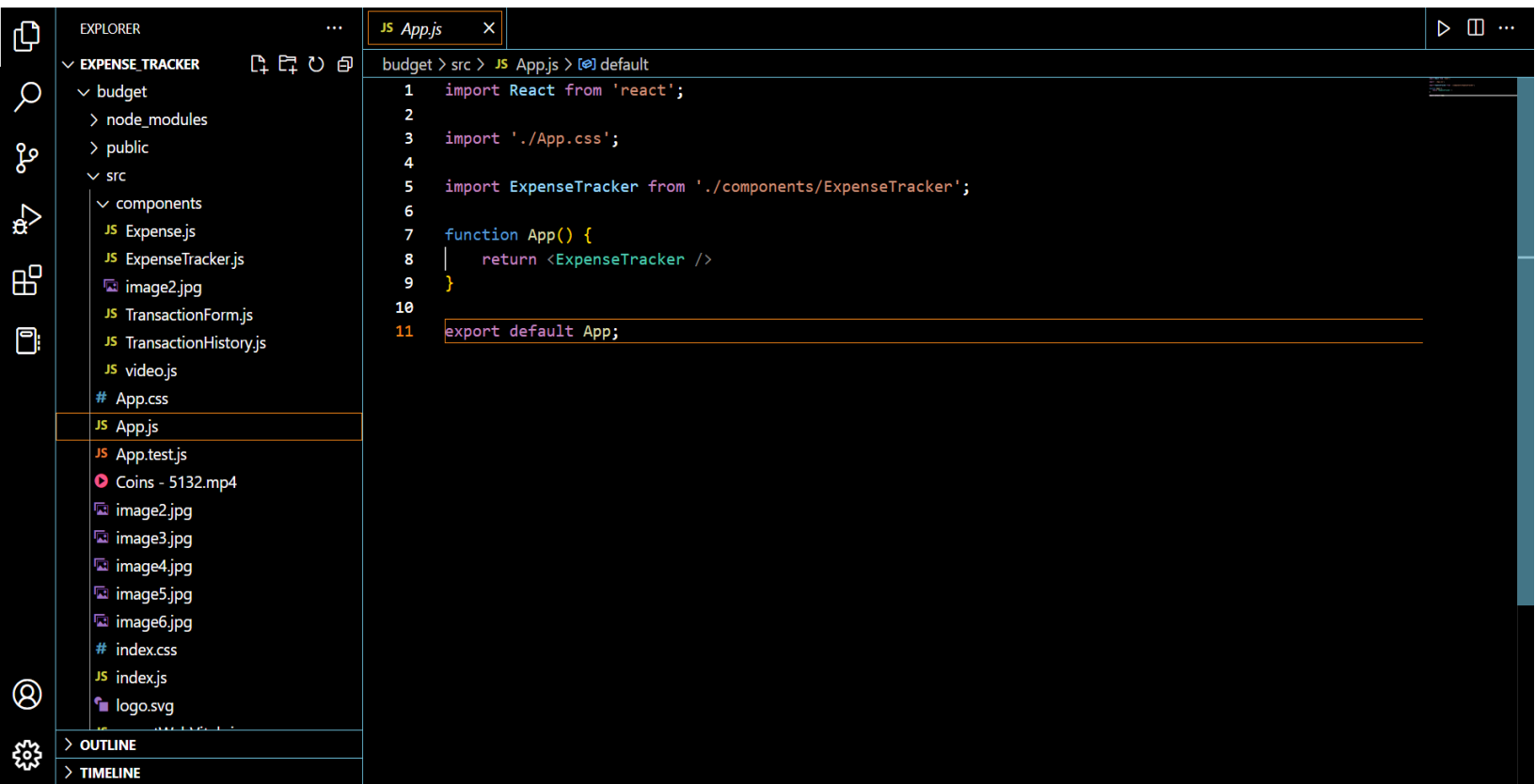
**Image used in background :** This is the image we use in the background



**CSS File :** This is used to add styles.



***App JS File*** : In this file we return our main file Expense tracker



The screenshot shows the Visual Studio Code editor interface. On the left, the Explorer sidebar displays the project structure under the name 'EXPENSE\_TRACKER'. The 'src' directory is expanded, showing a 'components' folder with files like 'Expense.js', 'ExpenseTracker.js', and 'App.js'. The 'App.js' file is selected and highlighted. The main editor area shows the code for 'App.js' with the following content:

```
budget > src > JS App.js > [0] default
1  import React from 'react';
2
3  import './App.css';
4
5  import ExpenseTracker from './components/ExpenseTracker';
6
7  function App() {
8    |   return <ExpenseTracker />
9  }
10
11  export default App;
```

# ***Conclusion***

We have completed our project within time limit with the coordination of our team members under the supervision of our mentor Mr. Akash Kumar Choudhary.

Our project repository is available at  
**<https://github.com/Codemaster0018/Project>**

# **Bibliography**

[www.google.com](http://www.google.com)

[www.geeksforgeeks.org](http://www.geeksforgeeks.org)

[www.youtube.com](http://www.youtube.com)



